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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,274	06/15/2001	Alex B. Burgin JR.	P-RD 4806	7878

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EXAMINER

LU, FRANK WEI MIN

ART UNIT PAPER NUMBER

1634

11

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/882,274

Applicant(s)

BURGIN ET AL.

Examiner

Frank W Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 17-56 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 4, 7, 8, 10, 12, 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 5, 6, 9, 11, 13 and 16 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election with traverse of Group I, claims 1-16 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that: (1) "examination of the claims of Groups I to IV together would not pose an undue burden on the Examiner."; (2) "[W]hile the claims of Groups I and II are patentably distinct, it is submitted that a thorough search of the elected method claims of Group I will reveal art relevant to the examination of the composition claims of Group II."; and "[A] search of the method of using a polynucleotide-3' phosphorothiolate in a non-enzymatic ligation of a nucleic acid will, of necessity, reveal information relevant to the examination of a composition containing a polynucleotide-3' phosphorothiolate." since "claims of Group I are directed to method for non-enzymatic ligation of a nucleic acid that employ a polynucleotide-3' phosphorothiolate, while the claims of Group II are directed to compositions containing a polynucleotide-3' phosphorothiolate.".

The above arguments have been fully considered and have not been found persuasive toward the withdrawal of the restriction requirement nor persuasive toward the relaxation of same such that Groups I, II, III, and IV will be examined together. First, applicant did not indicate why examination of the claims of Group III and IV together with the claims of Groups I and II would not pose an undue burden on the Examiner. As shown in previous office action, the examiner clearly explained why Group III and IV were patentably distinct from Groups I and II. Second, the examiner agreed with applicant "a thorough search of the elected method claims of Group I will reveal art relevant to the examination of the composition claims of Group II".

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However, this was not the reason for the restriction. The restriction was made due to different classifications of Groups I and II (see MPEP 808.02) and applicant appeared to agreed with the examiner that "the claims of Groups I and II are patentably distinct" (see applicant's remarks, page 2, last paragraph).

Therefore, the requirement is still deemed proper and is therefore made FINAL.

#### ***Sequence Rules Compliance***

2. The original filed sequencing listing has complied With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

#### ***Claim Objections***

3. Claim 2 is objected to because of the following informalities: Note that "SNP" is an abbreviation. This phrase can only be used after it appears once. .

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5, 6, 9, 11, 13, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. Claim 5 is rejected as vague and indefinite in view of the phrase "a polynucleotide-3' phosphorothiolate having a phosphodiester bond with said acceptor polynucleotide" because there is insufficient antecedent basis for this limitation in the claim. According to claim 1, said polynucleotide-3' phosphorothiolate does not have said acceptor polynucleotide. Does this phrase mean a ligated product between said polynucleotide-3' phosphorothiolate and said acceptor polynucleotide which is connected by a phosphodiester bond? Please clarify.

7. Claim 6 is rejected as vague and indefinite because there is insufficient antecedent basis for the limitations in the claim 6 since the method step of claim 5 happens before the method of claim 1 and claim 5 does not further limit claim 1. Please clarify.

8. Claim 9 is rejected as vague and indefinite in view of the phrase "said vector comprising an insert polynucleotide" because it is unclear whether "an insert polynucleotide" in claim 9 is different from "an insert" in claim 8 or not. If "an insert polynucleotide" in claim 9 is the same as "an insert" in claim 8, there is insufficient antecedent basis for this limitation in the claim.

According to claim 8, said vector does not have an insert. Please clarify.

9. Claim 11 is rejected as vague and indefinite because there is insufficient antecedent basis for the limitations in the claim 11 since the method step of claim 11 happens before the method of claim 8 and claim 11 does not further limit claim 8. Please clarify.

10. Claim 13 is rejected as vague and indefinite in view of the phrase "said vector comprising said acceptor polynucleotide" because there is insufficient antecedent basis for this limitation in the claim. According to claim 12, said vector does not have said acceptor polynucleotide. Does this phrase mean a ligated product between said vector comprising a polynucleotide-3'

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phosphorothiolate and said acceptor polynucleotide which is connected by a phosphodiester bond? Please clarify.

11. Claim 16 is rejected as vague and indefinite because there is insufficient antecedent basis for the limitations in the claim 16 since the method step of claim 16 happens before the method of claim 12 and claim 16 does not further limit claim 12. Please clarify.

#### *Conclusion*

12. Claims 1, 3, 4, 7, 8, 10, 12, 14, and 15 are allowed over prior art.

13. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

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Any inquiry of a general nature or relating to the status of this application should be directed to the patent Analyst of the Art Unit, Ms. Chantae Dessau, whose telephone number is (703) 605-1237.

Frank Lu  
January 27, 2002

A handwritten signature in black ink, appearing to read 'Ethan Whisenant', with a long horizontal flourish extending to the right.

Ethan Whisenant, Ph. D.  
Primary Examiner (FSA)